The study of biology imparts knowledge of the fundamental processes on which life – from the simplest bacteria to the human being – is based. This includes development and behaviour of organisms, as well as their interaction with the environment. During the first academic year, students acquire the necessary basic knowledge (general biology, organism biology, biochemistry, chemistry, mathematics, physics). During the second and third years, students explore more specialised topics giving them a general knowledge of the main themes in modern biology. In addition to lectures, the study programme contains exercises, practical training and seminars, as well as writing a bachelor’s thesis in a research unit.

Biological research provides the foundations for genetics, molecular biology, cell biology, microbiology, biotechnology, evolutionary biology and environmental sciences. In the medical area, biological research imparts essential knowledge about the structure and functioning of the human body, based on which medicine can determine the causes and effects of illnesses and develop suitable therapies. With the help of biological knowledge, pharmaceutics can in turn produce indispensable drugs, such as insulin or antibiotics, from genetically altered microorganisms instead of from their natural biological source. The production of such drugs is more economical and much more effective. When it comes to farming, crops are equipped with resistance factors against pests and are made less sensitive to drought or a lack of nutrients. In addition, optimal conditions can be determined for the sustainable use of natural resources.

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The biology studies at the University of Fribourg are thus suited for students who later wish to offer a broad range of skills on the job market in the areas of molecular and organismic biology.

Studies organisation

Structure of studies

120 ECTS credits + 60 ECTS credits in one or two minor study programmes freely chosen, 6 semesters

Curriculum

http://studies.unifr.ch/go/mjkY5 (French)
http://studies.unifr.ch/go/0fTFn (German)

Admission

The following Swiss school-leaving certificates grant admission to bachelor programmes at the University of Fribourg:

- Swiss academic Maturity Certificate
- Federal vocational or specialised Baccalaureate + supplementary examination of the Swiss Maturity Commission (passerelle)
- Bachelor Degree from a Swiss university, from an accredited Swiss university of applied sciences (HES/FH) or from a Swiss university of teacher education (HEP/PH)

A complete list of all further recognised Swiss school-leaving certificates is to be found on the webpages of swissuniversities (in French and German only): https://studies.unifr.ch/go/fr-admission-swisscertificates; https://studies.unifr.ch/go/de-admission-swisscertificates

Foreign upper secondary school-leaving certificates are recognised only if they correspond substantially to the Swiss Maturity Certificate. They must qualify as general education. Foreign school-leaving certificates are considered to be general education if, among other things, the last three years of schooling include at least six general education subjects, independent from each other, in accordance with the following list:

1. First language
2. Second language
3. Mathematics
4. Natural sciences (biology or chemistry or physics)
5. Humanities and social sciences (geography or history or economics/law)
6. Elective (computer sciences or philosophy or an additional language or an additional subject from category 4 or 5)

The general admission requirements to the bachelor programmes at the University of Fribourg for holders of foreign school-leaving certificates as well as the admission requirements for individual countries are to be found on the webpages of swissuniversities: https://studies.unifr.ch/go/en-admission-countries
In addition, foreign candidates must present proof of sufficient language skills in French or German.
All guidelines are available at (only in French and German): https://studies.unifr.ch/go/adm-guidelines

The assessment of foreign school-leaving certificates is based on the «Recommendations for the Assessment of Foreign Upper Secondary School-Leaving Certificates» adopted by the Chamber of universities of swissuniversities on 11.11.2021 https://studies.unifr.ch/go/swissuniversities21fr; https://studies.unifr.ch/go/swissuniversities21de. The admission requirements are valid for the respective academic year. The Rectorat of the University of Fribourg reserves the right to change these requirements at any time.

Alternatives

Also offered as a minor study programme (60/30 ECTS credits).

Contact

Faculty of Science and Medicine
Department of Biology
Dr Alessandro Puoti
bio-scimed@unifr.ch
http://studies.unifr.ch/go/en-biology